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Deposited on October 20, 2004

**PATENT**  
Dkt. 1169.12-0314

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: **Kent J. Forbord**  
Assignee: **SEAGATE TECHNOLOGY LLC**  
Application No.: **09/104,947** Group No.: **2652**  
Filed: **June 25, 1998** Examiner: **W. Klimowicz**  
For: **HIGH PERFORMANCE STANDARD CONFIGURATION DISC DRIVE HAVING  
SMALLER-THAN-STANDARD DISCS**

Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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**INFORMATION DISCLOSURE STATEMENT**

**List of Sections Forming Part of This Information Disclosure Statement**

The following sections are being submitted for this Information Disclosure Statement:

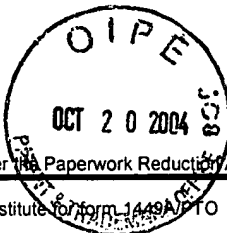
1. Preliminary Statements
2. Forms PTO/SB/08A and 08B (formerly Form PTO-1449)
3. Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
4. Identification of Person(s) Making This Information Disclosure Statement

**Section 1. Preliminary statements**

Applicant submits herewith a list of patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. § 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.



Substitute for form 1449A PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

Application Number	09/104,947
Filing Date	06/25/1998
First Named Inventor	Kent J. Forbord
Art Unit	2652
Examiner Name	W. Klimowicz
Attorney Docket Number	1160.12-0314

**RECEIVED**  
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Technology Center 2800**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US- 5,477,401	12/19/1995	Squires, et al.	
	AB	US- 5,590,001	12/31/1996	Ino, et al.	
	AC	US- 5,602,700	02/11/1997	Viskochill, et al.	
	AD	US- 5,870,247	02/09/1999	Schirle	
	AE	US- 5,841,605	11/24/1998	Foster, et al.	
	AF	US- 5,808,838	09/15/1998	Battu, et al.	
	AG	US- 5,808,830	09/15/1998	Stefansky, et al.	
	AH	US- 5,646,800	07/08/1997	Mihara, et al.	
	AI	US- 5,189,577	02/23/1993	Nishida, et al.	
	AJ	US- H1,221	08/03/1993	Best, et al.	
	AK	US- 4,149,207	04/10/1979	Porter, et al.	
	AL	US- 6,068,891	05/30/2000	O'Dell, et al.	
	AM	US- 6,236,533	05/22/2001	Forbord, et al.	
	AN	US- 3,703,713	11/21/1972	Pohm, et al.	
	AO	US- 3,835,998	09/17/1974	Cobb, et al.	
	AP	US- 3,931,645	01/06/1976	Dodd, et al.	
	AQ	US- 4,348,705	09/07/1982	Mittal, et al.	
	AR	US- 6,445,534	09/03/2002	Tsuda, et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

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Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

**Complete if Known**

*(Use as many sheets as necessary)*

Sheet 2 of 2

Application Number	09/104.947
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Filing Date	06/25/1998
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First Named Inventor	Kent J. Forbord
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Art Unit	2652
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Examiner Name	W. Klimowicz
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Attorney Docket Number	1160.12-0314
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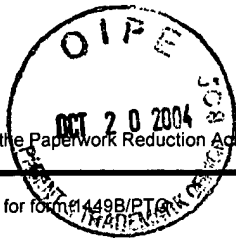
FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				

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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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**Complete if Known**

Application Number	09/104,947	<b>RECEIVED</b>
Filing Date	06/25/1998	
First Named Inventor	Kent J. Forbord	<b>OCT 25 2004</b>
Art Unit	2652	<b>Technology Center 2600</b>
Examiner Name	W. Klimowicz	
Attorney Docket Number	1160.12-0314	

Sheet 1 of 1

**NON PATENT LITERATURE DOCUMENTS**

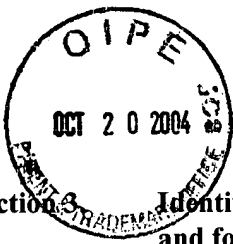
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BA	"ST34501FC, Cheetah 4LP Family," Product Data Sheet, by Seagate Technology, Inc., 2 pages, August 1, 1997.	
	BB	"ST19101FC, Cheetah 9 Family," Product Data Sheet, by Seagate Technology, Inc. 2 pages, August 4, 1997.	
	BC	ELECTRONIC INDUSTRIES ALLIANCE, "EIA Specification," Specification for Small Form Factor 88.9 mm (3.5 in) Disk Drives - Rev 1.1, Electronic Components, Assemblies, Equipment & Supplies Association, Arlington, VA, June 5, 1995.	
	BD	C. DENIS MEE, ET AL., Magnetic Storage Handbook, 2nd ed., McGraw-Hill, New York, p. 2.32, January 2, 1996.	
	BE	DENNIS F. TOROK, ET AL., "Flow and Thermal Fields in Channels Between Corotating Disks," IEEE Transactions on Components, Hybrids and Manufacturing Technology, IEEE, Los Angeles, CA, Vol. 11 (No. 4), January 2, 1988.	
	BF	ELECTRONIC INDUSTRIES ALLIANCE, "EIA Specification," Specification for Small Form Factor 88.9 mm (3.5 in) Disk Drives - Rev 1.3, Electronic Components, Assemblies, Equipment & Supplies Association, Arlington, VA, January 2, 1999.	

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<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**Section 3 Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted**

This application relies, under 35 U.S.C. § 120, on the earlier filing date of prior application S.N. 09/104,947, filed on June 25, 1998.

This application also relies, under 35 U.S.C. § 120, on the earlier filing date of prior provisional applications S.N. 60/057,955, filed on September 5, 1997 and S.N. 60/063,322 filed on October 27, 1997.

The following references were submitted to, and/or cited by, the Office in the prior applications and, therefore, are not required to be provided in this application:

US Patent No. 5,477,401  
5,590,001  
5,602,700  
5,870,247  
5,841,605  
5,808,838  
5,808,830  
5,646,800  
5,189,577  
H1,221  
4,149,207  
6,068,891  
6,236,533  
3,703,713  
3,835,998  
3,931,645  
4,348,705  
6,445,534  
5,835,310  
6,490,123

US Pat. Appln. 2002/0093758A1  
2002/0093759A1  
2002/0093760A1

Other "ST34501FC, Cheetah 4LP Family"  
"ST19101FC, Cheetah 9 Family"  
Electronic Industries Alliance (Rev 1.1) 06-05-1995  
Magnetic Storage Handbook  
"Flow and Thermal Fields in Channels Between Corotating Disks"  
Electronic Industries Alliance (Rev 1.3) 01-02-1999

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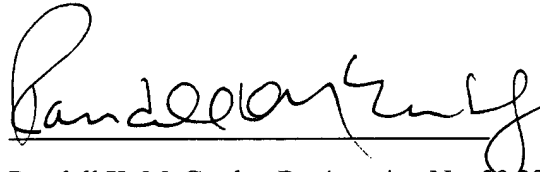
**Section 4. Identification of Person Making This Information Disclosure Statement**

The person making this certification is:

- a. the practitioner who signs below on the basis of the information supplied by the inventor(s) and in the practitioner's file.

Date:

10/20/04



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